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patient's walk had changed from that of a typical partial hemiplegic to a normal gait. The improvement in his left arm was less rapid, and although extensor power of the wrist and fingers improved slowly, considerable atrophy of the intrinsic muscles of the hand became apparent. Six months later his gait was normal. His face was normal in appearance and function. But even with good extensor power in his wrist and fingers there is still moderate atrophy of the intrinsic muscles of the left hand.

It is possible that his early complaints, diagnosed as secondary ulnar neuritis, were attributable to early stenosis or block of the right internal carotid artery.

SUMMARY

A case of thrombosis of the internal carotid artery with arteriotomy and almost complete recovery has been presented. The frequency of these lesions has been suggested. The importance of making a specific diagnosis by carotid angiogram in the so-called stroke syndrome has been indicated.

SHORT COMMUNICATIONS

THE END OF AN ERA

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THE MEDICAL profession of Canada has been made aware of the fact that the Canadian Medical Institute will cease operation June 30, 1960. As physician in charge of the Institute since it was founded in 1931, I have been asked to outline its history briefly and to give some observations on its operation.

The first association of the profession in regard to periodic health examination and the insurance companies was in 1930. The suggestion that the insurance companies should aid in the promotion of periodic health examinations was made in 1927, in a letter by Dr. R. E. Wodehouse, then secretary of the Canadian Tuberculosis Association, to the late Mr. V. R. Smith, general manager of the Confederation Life Association.

Correspondence was carried on between the health committee of the Canadian Life Insurance Officers Association and Dr. Clarence Routley of the Canadian Medical Association, from that date until 1930, when a periodic examination program under the auspices of the Canadian Medical Association functioned for one year. Then, with the blessing of the C.M.A., three of the insurance companies, namely, Sun Life Assurance Company, The London Life Insurance Company and Confederation Life Association, founded the Canadian Medical Institute. Credit must be given to the founders, Mr. E. E. Reid, Mr. V. R. Smith and Mr. A. B. Wood, who gave of their time and enthusiasm to see the Canadian Medical Institute through its first five years. In 1946 the North American Life Assurance Company was admitted to membership.

The idea the founders had in mind was two-fold: firstly, to educate and encourage the policyholder to have a physical examination regularly, and secondly, to encourage the policyholder to maintain contact with his family physician.

The first objective we feel has become well accepted. Today, through their place of employment, many people are regularly receiving periodic examinations, and the various provincial tuberculosis associations have definite programs of regular x-ray examination. With respect to the second objective, our surveys show that between 75% and 80% of our examinations were carried out by the family doctor.

Since commencing operation in 1931, we have completed over 260,000 examinations. This has undoubtedly played an important part in educating the public to such a procedure. After directing this service for 29 years one naturally has some opinions on the value and on the shortcomings of such a service. The most emphatic statement I can make is that this examination should be performed by the family physician. The laity are too prone to self-diagnosis. Further, the specialist would much rather have a referred patient than one coming in on his own. The annual examination keeps the family doctor in touch with his patient. This enables him to carry out appropriate preventive measures.

I would like to comment on the changed attitude of the medical profession towards periodic health examination. At first there was definite antagonism by a minority towards these examinations, particularly some of our elder statesmen. I well remember at a meeting of the Ontario Medical Association in London in the mid-thirties, a former senior officer of the Association who publicly ridiculed the whole idea. Today that has changed. The profession is convinced that periodic health examination is a useful preventive measure.

One remark heard occasionally, generally from people who know little about the subject, is that periodic health examinations make neurotics of some of those examined. In addition to the work in the Canadian Medical Institute, I have been conducting periodic examinations for the last 25 years for employees in five industries in Toronto. I can positively state that this accusation is without foundation—any person who is a neurotic after an examination was a neurotic before.

As to the findings of periodic health examinations, the most common disease is obesity. Our experience is that the majority try to reduce and many are quite successful. Thirty years ago the profession paid little attention to this condition. At present it is rare for an examiner not to caution a man about his weight, where such advice is indicated.

The Institute's examination form stresses the need for the physician to question carefully regarding

any change of function which might indicate the presence of an early malignancy. It has been said that the family physician is the best, and, in many areas, the only cancer clinic, and that by his careful examination and search for signs and symptoms suggestive of early malignancy, a definite reduction in the cancer death rate is possible. At the best of times it is difficult to determine the presence of such a condition, but from a recent study of the records of some 2000 consecutive examinations we learned that 3% were advised by their examiner to have a complete gastro-intestinal investigation because of some obscure symptom.

A prominent urologist wrote me stating that he had recently operated upon two patients with early prostatic carcinoma, both discovered through periodic health examinations by the Canadian Medical Institute. He stated that in each case the prognosis was good.

An interesting sidelight on periodic health examinations is given in an article in the *Journal of Postgraduate Medicine* (March 1960) by Dr. Roger Baker, "Approximately 12,000 men die each year from prostatic carcinoma, yet in about 90% of the patients this malignancy begins in the area of the prostate that is palpated at the time of rectal examination. Strangely enough, only 5 to 10% of the patients with carcinoma of the prostate are referred to the urologist early enough so that radical surgery can be attempted. There are two possible reasons for this. Not enough periodic examinations are done on men over the age of 45 years, and physicians are not completely familiar with the digital characteristics of early carcinoma of the prostate."

Glycosuria was detected in over one in every 100 examinations of the urine. A few of these were proved to be of renal type, but the percentage was small.

Some years ago we studied the records of 500 persons who died of coronary artery disease and who had been examined within two years of death. In 85% one or more of three findings were noted: overweight, 10% or more; abdominal girth greater than girth of chest on inspiration; and hypertension of 140/100 mm. Hg or greater.

Further examples of the value of periodic health examinations could be given, but I would like instead to repeat a conversation I had with a prominent physician in western Ontario. We were discussing experiences when he mentioned that during the last year he had detected three cases of early breast carcinoma by periodic examination. All had been operated upon, and in all the prognosis was excellent, owing to early detection.

In closing, I would like to thank the medical profession of Canada for their interest and co-operation in the work of the Canadian Medical Institute over its 29 years of operation.

ANTIMALARIAL COMPOUNDS IN RHEUMATOID DISEASE

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OBSERVATIONS on the use of antimalarial compounds in rheumatoid disease continue to appear in the medical literature with sufficient frequency to warrant a further attempt to assess their value in the long-term management of this chronic and vacillating disease.

Until, or unless, a cure be found for rheumatoid disease (which is extremely doubtful, as it seems to be a systemic upset that certain individuals manifest upon exposure to sufficient stress of an appropriate type), the ideal drug would be one that is effective in the majority of those afflicted, and of such low toxicity that it can be given, in an effective dosage, for as many years as may be necessary to control the disease process in any given patient. This concept involves the "chronic toxicity" of such a drug just as much as, or probably more than, its effectiveness.

At this, the end of the first decade, the daily use of cortisone-type steroids has been shown to be too hazardous when continued for years to be worth the risk in all except the worst cases (which amount to no more than about 10% of those afflicted). Long-term phenylbutazone (Butazolidin) treatment, while still hazardous, is safer (if well tolerated for three to six months) but is effective in less than 50% of those with classical peripheral rheumatoid arthritis, although it may well be the drug of choice for the long-term control of rheumatoid spondylitis.

For a variety of reasons, and although quinine is of no value, the antimalarials have been employed for rheumatoid disease since 1951. After the "lead" in the treatment of discoid lupus, quinacrine (Atabrine, Mepacrine) was first employed but was discarded, because of chronic toxicity, in favour of chloroquine (Aralen, Resochin). More recently, hydroxychloroquine (Plaquenil) has received fairly extensive trial because, at least in the same range of dosage, it is even less toxic than chloroquine. Amodiaquin (Camoquin, Miaquin) is also under study.

All published papers indicate that chloroquine has the property of inhibiting rheumatoid disease to a variable degree in the majority of patients. Its therapeutic position has been somewhat confused, however, by variation in dosage used and therefore in the findings of acute and chronic toxicity reported. It now appears that most patients cannot tolerate more than 250 mg. of chloroquine diphosphate daily for long periods of time but that, if tolerated, 250 mg. is an effective dosage in 50% or more of patients.[1] Lesser doses may be just as effective in some adult patients, and in juveniles. Doses of 500 mg. or more daily result in a high incidence of gastro-intestinal side effects that are